APPENDIX B – WATER QUALITY

Table B-1. Summary of Water Quality Criteria and Priority Pollutant Data from Specific Coon Creek/Auburn Ravine Locations.

Criteria assume hardness of 100 mg/L. Criteria would be lower than below because water hardness is generally less than 100 mg/L. Freshwater aquatic long-term exposure is continuous concentration criterion (CCC) and human health criterion is for water and organisms that might be consumed.

Parameter	CA Toxic Rule Freshwater Aquatic (ug/L)	CA Toxic Rule Human Health (ug/L)	CC1	CC2	CC4	AR1	AR5	AR3	EC1
Aluminum**	87*	No Std.	0.10- 0.40	ND- 0.46	79.4-2840		ND-1700	112-8060	101-3920
Arsenic**	150	No Std.	ND	ND	0.601-1.44	1.8	<23.2	0.837-2.55	0.613-1.75
Cadmium	2.2	Varies	ND	ND	0.007-0.125		ND-2.9	0.006-0.146	0.013-0.098
Chromium	No Std.	No Std.	ND	ND	0.2-9.06		ND-5.0	0.33-15	0.32-7.7
Chromium (III)	180	Varies							
Chromium (VI)	11	Varies	ND	ND					
Copper**	9	1,300	ND	ND	0.8-15.7	0.62-2.1	0.77-22	1.77-19.7	2.14-11.7
Lead**	2.5	Varies	ND	ND		0.24	ND-15.0		
Mercury	0.77*	0.05*	ND-0.38	ND- 0.20	0.00186- 0.0177	0.021**	0.0016- 0.21**	0.00429- 0.0687	0.00284- 0.0288
Nickel**	52	610	ND	ND	0.88-11.1	1.5-1.6	0.5-82	0.79-15.4	1.91-9.2
Selenium	5	Varies	ND	ND	ND-0.68		ND	ND-0.15- 0.34	ND-0.38
Silver	3.4 (Acute)	No Std.	ND	ND			ND-<0.5		
Thallium	No Std.	1.7	ND	ND			ND-0.02		
Zinc**	120	No Std.	0.0-300	0.0-45	0.96-16.2	6.1-6.4	0.77-70	0.88-29	1.13-15.8

CC1 = Coon Creek Watershed - 1998-99 Three Samples from Rock Ck. Upstream of the Discharge of SMD#1; Sampling Station (R1) for SMD#1.

CC2 = Coon Creek Watershed - 1998-99 Three Samples from Dry Ck. Upstream of the Discharge of SMD#1; Sampling Station (R3) for SMD#1.

CC4 = Coon Creek Watershed - 2001 Range of Eleven Samples from Coon Ck. at Confluence with the Eastside Canal - DWR Provisional Data.

AR1 = Auburn Ravine Watershed - 1994-95; Range of 1 to 4 Samples from Auburn Ravine Upstream of the Discharge of City of Auburn WWTP; Sampling Station (R1).

AR5 = Auburn Ravine Watershed - 1998-99; Range of Multiple Samples from Auburn Ravine at Joiner Parkway within the City of Lincoln.

AR9A = Auburn Ravine Watershed - 2001 Range of Eleven Samples from Auburn Ravine at Pleasant Grove Road - DWR Provisional Data

EC1 = Eastside Canal - 2001 Range of Eleven Samples Downstream of Confluence with Auburn Ravine and Immediately Upstream of the Cross Canal; DWR Provisional Data

^{*} From National Recommended Water Quality Criteria for Non Priority Pollutants (63 FR 68353-68364).

^{**} Dissolved Fraction

Table B-2. General Water Quality Parameters for Four Locations in the Coon Creek Watershed.

Parameter	CC1	CC2	CC3	CC4
Water Temp. (C)			8.4-22.2	
Ammonia as N (mg/L)	<0.05-0.35	0.09-0.35	<0.178 -3.442	
Total Dissolved Solids (mg/L)	107-933	264-933		85-236
Total Suspended Solids (mg/L)				2-46
Alkalinity (mg/L)	4-33	3.6-33		49-183
Hardness (mg/L)				47-176
Conductivity (umhos/cm)	70-145	72-95	208.4-310.8	141-399
рН	6.0-7.1	6.31-7.1	7.3-7.7	6.7-7.8
Nitrate as Nitrogen (mg/L)	0.091-0.58	0.023-0.73		0.04-1.80*
Ortho-phosphate (mg/L)				ND-0.14
Dissolved Oxygen (mg/L)			6.8-10.3	
Turbidity (NTU)			2.5-8.3	2-80
Flow (cfs) 2001 Range of Monthly Means	6.77->12.7	0.6-6.2		

CC1 = Coon Creek Watershed - 1998-99 Three Samples from Rock Ck. Upstream of the Discharge of SMD#1; Sampling Station (R1) for SMD#1.

CC2 = Coon Creek Watershed - 1998-99 Three Samples from Dry Ck. Upstream of the Discharge of SMD#1; Sampling Station (R3) for SMD#1.

CC3 = Coon Creek Watershed - 2001 Range of Monthly Means Dry Creek Below Rock Ck. Confluence. Sampling Station (R4) for SMD#1.

CC4 = Coon Creek Watershed - 2001 Range of Eleven Samples from Coon Ck. at Confluence with the Eastside Canal - DWR Provisional Data.

^{*} Dissolved Nitrite + Nitrate

Table B-3. General Water Quality Parameters for Nine Locations in the Auburn Ravine Watershed, and One Eastside Canal Station.

Parameter	AR1	AR2	AR3	AR4	AR5	AR6	AR7	AR8	AR9	AR9A	EC1
Water Temp. (C)	6.4-15.9	6.9-16.4	8.6-18.3	14.7-16.9	15.5-16 ³	15.5-18 ³	15.5- 17.3 ³	16-17 ³	17-22.7 ³		
Total Suspended Solids (mg/L) ¹	<3.0-6.0	<3.0-5.5	2.0-6.0							4-23	14-62
Total Dissolved Solids (mg/L)	74 ²	170 ²	110 ²							56-124	7-145
Alkalinity (mg/L)										26-84	46-126
Hardness (mg/L) 1	16-73 ²	20-61 2	14-71 2							25-70	46-72
Electrical Conductivity (umhos/cm)	32-121 ²	44-327 ²	46-235 ²							81-198	127-295
pН	5.7-7.4	5.1-7.4	6.6-9.4	6.8-7.2 ³	6.8-7.3 ³	6.5-7.2 ³	6.7-7.4 ³	6.9-7.4 ³	5.9-7.4 ³	6.6-7.5	6.9-7.9
Nitrate as Nitrogen (mg/L) ¹	<0.50- 3.6	<0.50-8.5	<0.50- 3.7	0.13			0.12		0.11	ND- 1.02*	ND- 0.01- 1.4*
Ammonia as N (mg/L)	0.02- 0.55	0.02-2.05	<0.05- 0.21	< 0.05			<0.05 3		<0.05- 0.052 ³		
Ortho-phosphate (mg/L)										0.02- 0.04	ND- 0.09
Total Phosphorus (mg/L) ¹	<0.02- <0.05	0.14-1.1	0.08- 0.51	<0.05- 0.05			0.06- 0.08 ³		0.09 ³		
Dissolved Oxygen (mg/L)	9.8-12.1	9.7-11.8	9.25- 11.09	7.2-10.4	7.3-7.8 ³	7.2-8.1 ³	7.4-9.8 ³	5.7-7.4 ³	6.2-8.3 ³		
Biological Oxygen Demand (mg/L)				<3 3			<3 3		<3 3		
Turbidity (NTU)	2.6-47.5	2.6-47.2	0.49-5.3	$0.72 - 3.9^{3}$			1.8-6.6 ³		4.6-4.7 ³	5-136	11-56
Fecal Coliform (MPN/100 ml)	50-800	110-300	70-300	30-50 ³					90-500 ³		

^{1 1995} Range of N=4 Samples (Jan, May, Sep, Oct);

² Data from a one time sampling event on 10/25/1995;

³ Data from a one time sampling event on 10/20/1995

AR1 = Auburn Ravine - 1995; Range of Monthly Means for Samples from Auburn Ravine Upstream of the Discharge of City of Auburn WWTP; Sampling Station (R1).

AR2 = Auburn Ravine - 1995; Range of Monthly Means for Samples from Auburn Ravine Upstream of the Discharge of City of Auburn WWTP; Sampling Station (R2)

AR3 = Auburn Ravine - 1995; Range of N=4 Samples (Jan, May, Sep, Oct) Downstream of the Discharge of City of Auburn WWTP; Sampling Station (R4)..

AR4 = Auburn Ravine - 1995 Summer/Fall Sampling; Auburn Ravine at SR 193 (Station L7 in Table 3, Appendix E, FEIR Auburn Wastewater Facility Plan 1997.

AR5 = Auburn Ravine - 1995 Auburn Ravine at Joiner Parkway in Lincoln, (Station L6 in Table 3, Appendix E, FEIR Auburn Wastewater Facility Plan 1997.

AR6 = Auburn Ravine - 1995 Auburn Ravine at Nelson Lane, (Station L5 in Table 3, Appendix E, FEIR Auburn Wastewater Facility Plan 1997.

- AR7 = Auburn Ravine 1995 Summer/Fall Sampling; Auburn Ravine at Moore Rd. (Station L4.5 in Table 3, Appendix E, FEIR Auburn Wastewater Facility Plan 1997.
- AR8 = Auburn Ravine 1995 Auburn Ravine at Dowd Rd., (Station L2 in Table 3, Appendix E, FEIR Auburn Wastewater Facility Plan 1997.
- AR9 = Auburn Ravine 1995 Summer/Fall Sampling; Auburn Ravine at Pleasant Grove Rd. (Station L1 in Table 3, Appendix E, FEIR Auburn Wastewater Facility Plan 1997.
- A9A = Auburn Ravine 2001 Range of Eleven Samples from Auburn Ravine at Pleasant Grove Road DWR Provisional Data
- EC1 = Eastside Canal 2001 Range of Eleven Samples Downstream of Confluence with Auburn Ravine and Immediately Upstream of the Cross Canal; DWR Provisional Data
- * Dissolved Nitrite + Nitrate

June 28, 2002

CHEM NAME	USE TYPE	MEAN ANN. APPLICATION, 1991-99, LBS
Copper sulfate (pentahydrate)	Insecticide, Fungicide, Algaecide, Water Treatment, Molluscicide	
Molinate	Herbicide	37,818
Thiobencarb	Herbicide	20,374
Propanil	Herbicide	7,206
MCPA, dimethylamine salt	Herbicide	3,633
Carbofuran	Insecticide	3,110
2,4-D, dimethylamine salt	Herbicide	2,325
Sodium chlorate		1,010
MCIAL code 401	Insecticide, Adjuvant	846
Petroleum hydrocarbons	Insecticide, Solvent	635
Bensulfuron methyl	Herbicide	540
Triclopyr, triethylamine salt	Herbicide	203
Polyoxyethylene sorbital, mixed ethyl ester	Adjuvant	152
Pendimethalin	Herbicide	70
Alkyl oxy-polyoxyethylene and alkyl	Adjuvant	46
phenyloxy-polyoxyethylene	1 10,00 1 00.10	
Carfentrazone-ethyl	Herbicide	36
Oleic acid, methyl ester	Adjuvant	32
Fenoxaprop ethyl	Herbicide	26
Alkyl phenoxy poly (ethoxy) ethanol	Adjuvant	18
Alkylaryl poly(oxyethylene) glycol	Adjuvant	16
Polyacrylamide polymer	Adjuvant	16
Isopropyl alcohol	Microbiocide	14
Polyoxyethylene mixed fatty acid ester	Adjuvant	11
Tall oil acids	Adjuvant	10
Undecyl polyoxyethylene (5 moles ethylene oxide)	Adjuvant	6.8
Lambda cyhalothrin	Insecticide	4.1
Azoxystrobin	Fungicide	3.1
Aluminum phosphide	Insecticide, Fungicide, Fumigant	1.0
Polyoxyethylene polypropoxy propanol	Adjuvant	0.7
Dimethyl poly siloxane	Insecticide, Adjuvant	0.2
Oleic acid	Adjuvant	0.1

The data in Table B2-5 are from the database of the Pesticide Action Network; they are based on a compilation of data from the California Department of Pesticide Regulations (see http://docs.pesticideinfo.org/misc/data.html#Overview).

The relative contribution of stormwater, base load and WWTP's shown in Figures WQ-1 through WQ-5 was estimated by applying the concentration data of the National Urban Runoff Project (NURP) to the runoff from 5% of the basin area (assuming that much of the basin is urbanized). The base load was estimated from stream water quality data, adjusted to remove the WWTP and stormwater contributions. The WWTP loads were taken from effluent data and the estimated ultimate loading from the future Lincoln WWTP, as shown in the Draft EIR for the City's Wastewater Treatment and Reclamation Facility (City of Lincoln, 1995).

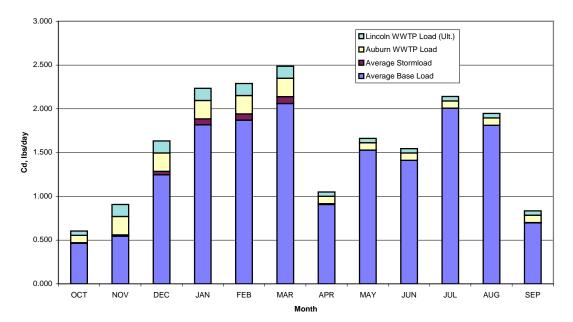
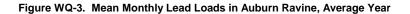
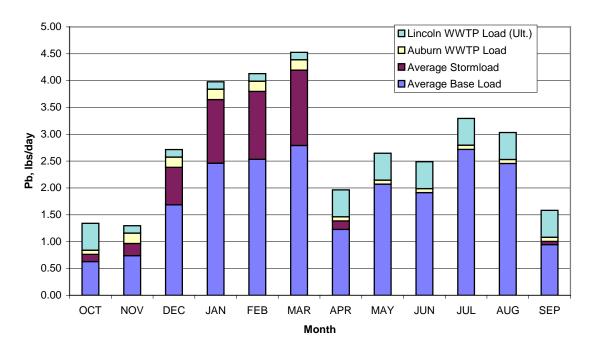


Figure WQ-1. Mean Monthly Cadmium Loads in Auburn Ravine

6.00 ■ Lincoln WWTP Load (Ult.) □ Auburn WWTP Load 5.00 ■ Average Stormload ■ Average Base Load 4.00 Cu, lbs/day 3.00 2.00 1.00 0.00 OCT DEC NOV JAN **FEB** MAR **APR** MAY JUN JUL AUG SEP Month

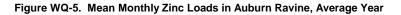
Figure WQ-2. Mean Monthly Copper Loads in Auburn Ravine, Average Year





4.000 3.500 ■Lincoln WWTP Load (Ult.) □Auburn WWTP Load 3.000 2.500 ■ Average Stormload Hg, Ibs/day 2.000 1.500 1.000 0.500 0.000 OCT NOV DEC APR JUN JUL AUG SEP JAN FEB MAR MAY Month

Figure WQ-4. Mean Monthly Mercury Loads in Auburn Ravine, Average Year



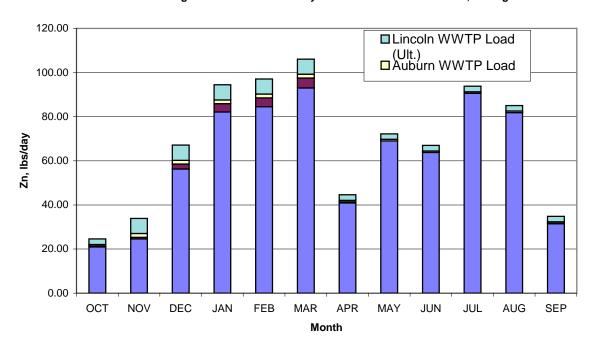


Table B-5. Water Quality Monitoring Results for Auburn Ravine, Coon Creek, and Cross Canal, from the DWR Central District Monitoring Program

Auburn Ravine Results													
Sampling Conducted by DWR-Central	District	į	P	ROVI	SIONA	L DAT	A - NO	T RE	VIEWEI	FOR A	CCURA	CY	
Sample Date:	1/25/01	3/1/01	4/5/01	5/3/01	6/6/01	7/17/01	8/2/01	9/6/01	10/11/01	10/31/01	12/21/01	1/17/02	
Analyte	1/25/01	5/1/01	4/5/01	2/3/01	0/0/01	7/17/01	0/2/01	2/0/01	10/11/01	10/01/01	12/21/01	1/11/102	Units
													CIIICS
INORGANIC (FG)	1.40	100	0.7	101	0.2	0.1	07	110	124	1.67	107	100	G/
Conductance (EC)	149	198	97	101	92	81	87	113	124	167	137	109	uS/cm
Dissolved Calcium	12.00	15.00	8.00	8.00	6.00	6.00	6.09	5	9	13	9.83	7.7	mg/L
Dissolved Magnesium	6.00	8.00	4.00	4.00	3.00	3.00	3.25	3	5	6.54	5.09	4.3	mg/L
Dissolved Nitrite + Nitrate	0.59	0.65	0.12	0.16	0.05	0.02	ND 2.4	0.03	0.01	0.06	1.02	0.4	mg/L as N
Dissolved Organic Carbon	3.60	5.50	1.80	3.20	0.10	2.20	2.4	3	3.9	5.9	7.6	2.2	mg/L as C mg/L as
Hardness	55.00	70.00	36.00	36.00	27.00	27.00	29	25	43	59	46	37	CaCO3
Ortho-phosphate	0.04	0.03	0.02	0.03	0.03	0.02	0.02	0.04	0.04	0.04	0.04	0.01	mg/L as P
рН	7.50	7.50	7.10	7.00	6.60	7.20	7.2	6.8	6.8	7.4	6.8	6.7	pH units
Total Alkalinity	84.00	66.00	35.00	35.00	30.00	26.00	30	42	46	67	37	35	mg/L as CaCO3
Total Dissolved Solids	93.00	124.00			56.00	42.00	56	70	80	110	105	72	mg/L
Total Suspended Solids	14.00	23.00			4.00	10.00	6	4	13	70	(a)	39	mg/L
Turbidity	16.30	31.20	9.66	5.18	4.91	7	5	5	7	33	136	24	NTU
,													
ORGANIC													
Azinphos methyl (Guthion)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ug/L
Benfluralin	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ug/L
Bromacil	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ug/L
Carbophenothion (Trithion)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ug/L
Chlorpyrifos	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ug/L
Cyanazine	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ug/L
Demeton (O + S)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ug/L
Diazinon	0.03	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ug/L
Dimethoate	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ug/L
Disulfoton	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ug/L
Ethion	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ug/L
Malathion	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ug/L
Methidathion	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ug/L
Mevinphos	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ug/L
Naled	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ug/L
Napropamide	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ug/L
Norflurazon	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ug/L
Parathion (Ethyl)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ug/L
Parathion (Methyl)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ug/L
Pendimethalin	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ug/L

Appendix B: Water Quality June 28, 2002

Table B-5. Water Quality Monitoring Results for Auburn Ravine, Coon Creek, and Cross Canal, from the DWR Central District Monitoring Program

Auburn Ravine Results													
Sampling Conducted by DWR-Cer	ntral District		P	ROVI	SIONA	L DAT	'A - N(T RE	VIEWEI	FOR A	CCURA	CY	
Sample Date:	1/25/01	3/1/01	4/5/01	5/3/01	6/6/01	7/17/01	8/2/01	9/6/01	10/11/01	10/31/01	12/21/01	1/17/02	
<u>Analyte</u>													<u>Units</u>
Phorate	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ug/L
Phosalone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ug/L
Phosmet	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ug/L
Profenofos	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ug/L
Prometryn	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ug/L
Propetamphos	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ug/L
s,s,s-Tributyl													
Phosphorotrithiote (DEF)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ug/L
Trifluralin	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ug/L
DIOLOGICAL			Ī	ĺ									
<u>BIOLOGICAL</u>													MPN/100
Total Coliform	(b)	(b)	(b)	1600	900	300	280	170	900	>1600	>1600	220	mL
Fecal coliform	(b)	(b)	(b)	300	500	240	300	80	80	430	>1600	130	MPN/100 mL
Escherichia coli	(b)	(b)	(b)	21	130	130	170	50	80	32	120	50	MPN/100 mL
TRACE METALS													
Al	817	1470	370	228	112	466	253	201	379	986	8060	955	ug/L
As	1.11	1.490	0.837	0.859	0.939	0.871	1.04	1.39	1.64	2.36	2.55	1.32	ug/L
Cd	0.02	0.024	0.009	0.006	0.008	0.018	0.008	0.006	0.01	0.038	0.146	0.02	ug/L
Cr	1.91	3.22	1.33	0.61	0.33	1.52	0.68	0.45	0.97	2.69	15	2.82	ug/L
Cu	3.81	5.71	2.01	1.79	2.47	2.97	1.77	1.88	2.93	5.25	19.7	3.93	ug/L
Fe	1120	2060	714	397	300	805	438	692	686	1970	10200	1680	ug/L
Hg	15.30	19.20	10.60	5.17	4.29	9.4	5.66	4.32	6.93	25.2	68.7	31.1	ng/L
МеНg	0.39	0.691	0.223	0.383	0.113	0.439	0.443	0.788	0.74	1.4	1.31	0.331	ng/L
Mn	53.3	50	30.2	22.9	35.9	48.8	43.3	45.8	64.3	533	326	70.4	ug/L
Ni	2.19	(d)	1.47	0.79	1.44	1.55	1.1	1.2	1.97	4.41	15.4	3.25	ug/L
Se	ND	0.34	ND	ND	ND	0.29	ND	0.15	0.17	0.19	ND	0.5	ug/L
Zn	4.36	4.82	2.49	1.11	1.13	3.88	1.51	0.88	2	6.24	29	6.25	ug/L

Notes

⁽a) TSS test not conducted for this sample as hold times were violated at laboratory.

⁽b) Biological analyses not conducted for this sampling event, as contract for using the subcontracted lab was not yet established.

⁽c) No flow in Cross Canal on 7/17/2001.

⁽d) Nickel concentration was not analyzed for by the contract laboratory.

Table B-5. Water Quality Monitoring Results for Auburn Ravine, Coon Creek, and Cross Canal, from the DWR Central District Monitoring Program

Coon Creek Results													
			(Coon	Cre	ek Ro	esult	S				Ī	
Sampling Conducted by DWR-0	Central Distri	ct I	PF	OVISI	ONAL	DATA	- NOT	REV	IEWED	FOR AC	CCURAC	CY	
Sample Date:	1/25/01	3/1/01	4/5/01	5/3/01	6/6/01	7/17/01	8/2/01	9/6/01	10/11/01	10/31/01	12/21/01	1/17/02	
<u>Analyte</u>		1					1		T	1			<u>Units</u>
<u>INORGANIC</u>													
Conductance (EC)	195	199	180	193	141	399	391	288	171	180	164	239	uS/cm
Dissolved Calcium	13.00	14.00	14.00	14.00	10.00	33.00	34	9	13	11.7	11.5	15.9	mg/L
Dissolved Magnesium	8.00	10.00	9.00	9.00	6.00	22.00	22	6	8	8.52	8.32	12.3	mg/L
Dissolved Nitrite + Nitrate	1.80	0.70	0.38	0.24	0.13	0.4	0.07	0.1	0.04	0.26	0.72	1.3	mg/L as N
Dissolved Organic Carbon	4.90	6.20	3.90	4.80	2.80	1.80	2.9	4	5.1	3.7	8.8	3.9	mg/L as C
Hardness	65.00	76.00	72.00	72.00	50.00	173.00	176	47	65	64	63	90	mg/L as CaCO3
Ortho-phosphate	0.14	0.03	0.02	0.04	0.02	0.03	ND	0.03	0.02	0.02	0.07	0.04	mg/L as P
рН	7.50	7.50	7.70	7.60	6.70	7.80	7.8	7.3	6.8	7.3	7	7.4	pH units
Total Alkalinity	78.00	66.00	68.00	76.00	49.00	183.00	181	124	63	66	51	84	mg/L as CaCO3
Total Dissolved Solids	116.00	126.00	112.00	109.00	85.00	232.00	236	167	110	114	121	147	mg/L
Total Suspended Solids	19.00	46.00	13.00	28.00	11.00	6.00	2	4	7	3	(a)	8	mg/L
Turbidity	18.50	65.20	13.10	22.30	12.60	8.00	2	7	8	5	80	12	NTU
<u>Organic</u>													
Azinphos methyl (Guthion)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ug/L
Benfluralin	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ug/L
Bromacil	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ug/L
Carbophenothion (Trithion)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ug/L
Chlorpyrifos	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ug/L
Cyanazine	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ug/L
Demeton (O + S)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ug/L
Diazinon	0.02	0.01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ug/L
Dimethoate	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ug/L
Disulfoton	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ug/L
Ethion	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ug/L
Malathion	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ug/L
Methidathion	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ug/L
Mevinphos	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ug/L
Naled	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ug/L
Napropamide	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ug/L
Norflurazon	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ug/L
Parathion (Ethyl)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ug/L
Parathion (Methyl)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ug/L

Table B-5. Water Quality Monitoring Results for Auburn Ravine, Coon Creek, and Cross Canal,

June 28, 2002

Coon Creek Results													
Sampling Conducted by DWR-C	Central Distri	ct	PF	ROVISI	ONAL	DATA	- NOT	rev	IEWED	FOR AC	CCURAC	CY	
Sample Date:	1/25/01	3/1/01	4/5/01	5/3/01	6/6/01	7/17/01	8/2/01	9/6/01	10/11/01	10/31/01	12/21/01	1/17/02	
<u>Analyte</u>													<u>Units</u>
Pendimethalin	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ug/L
Phorate	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ug/L
Phosalone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ug/L
Phosmet	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ug/L
Profenofos	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ug/L
Prometryn	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ug/L
Propetamphos	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ug/L
s,s,s-Tributyl													
Phosphorotrithiote (DEF)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ug/L
Trifluralin	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ug/L
<u>Biological</u>													
Total Coliform	(b)	(b)	(b)	>1600	1600	>1600	>1600	140	1600	900	>1600	1600	MPN/100 mL
Fecal coliform	(b)	(b)	(b)	430	900	500	90	140	110	80	430	300	MPN/100 mL
Escherichia coli	(b)	(b)	(b)	280	170	220	90	33	21	14	430	17	MPN/100 mL
Trace Metals													
Al	611	2200	421	865	293	244	79.4	311	238	176	2840	317	ug/L
As	0.632	0.724	0.569	0.889	0.667	1.31	1.21	1.44	0.841	0.601	0.768	0.512	ug/L
Cd	0.042	0.056	0.028	0.045	0.024	0.019	0.007	0.011	0.013	0.007	0.125	0.036	ug/L
Cr	1.85	7.04	1.56	2.63	1.09	1.37	0.2	1.12	0.75	0.4	9.06	1.12	ug/L
Cu	4.48	10.60	3.95	5.48	4.58	1.97	0.8	2.84	3.87	2.88	15.7	3.75	ug/L
Fe	1090	4240	979	1640	764	505	274	668	588	386	5100	977	ug/L
Hg	6.11	7.54	4.94	6.03	2.94	2.14	2.96	2.12	2.52	1.86	17.7	4.01	ng/L
МеНg	0.160	0.151	0.217	0.299	0.975	0.137	0.898	0.167	0.185	0.154	0.389	0.17	ng/L
Mn	69.9	105	65.0	128	88.0	41.4	130	63	39.8	12.4	150	59.4	ug/L
Ni	3.05	(d)	2.43	3.64	2.42	0.88	1.12	2.06	2.15	1.71	11.1	2.57	ug/L
Se	ND	0.20	ND	0.17	0.15	0.68	0.42	0.22	0.23	ND	ND	ND	ug/L
Zn	6.58	10.10	2.76	3.76	2.13	1.53	0.96	1.46	1.15	1.4	16.2	4.76	ug/L

from the DWR Central District Monitoring Program

Notes

- (a) TSS test not conducted for this sample as hold times were violated at laboratory.
- (b) Biological analyses not conducted for this sampling event, as contract for using the subcontracted lab was not yet established.
- (c) No flow in Cross Canal on 7/17/2001.

Table B-5. Water Quality Monitoring Results for Auburn Ravine, Coon Creek, and Cross Canal, from the DWR Central District Monitoring Program

Coon Creek Results														
Sampling Conducted by DWR-Cer	ampling Conducted by DWR-Central District PROVISIONAL DATA - NOT REVIEWED FOR ACCURACY													
Sample Date:	1/25/01	3/1/01	4/5/01	5/3/01	6/6/01	7/17/01	8/2/01	9/6/01	10/11/01	10/31/01	12/21/01	1/17/02		
<u>Analyte</u>													<u>Units</u>	

⁽d) Nickel concentration was not analyzed for by the contract laboratory.

⁽e) Sample improperly preserved.

ND: Analyte concentration below method reporting limit.

Table B-5. Water Quality Monitoring Results for Auburn Ravine, Coon Creek, and Cross Canal, from the DWR Central District Monitoring Program

Cross Canal Results Sampling Conducted by DWR-Central District PROVISIONAL DATA - NOT REVIEWED FOR ACCURACY													
Sampling Conducted by DWR-Ce	ntral Distr	ict	P	ROVI	SIONA	L DAT	`A - N(OT RE	VIEWEI	FOR A	CCURA	CY	
Sample Date:	1/25/01	3/1/01	4/5/01	5/3/01	6/6/01	7/17/01	8/2/01	9/6/01	10/11/01	10/31/01	12/21/01	1/17/02	
Analyte													Units
							Ī						CIIICS
INORGANIC													
Inorganic Conductores (EC)	193	106	127	132	153	(a)	150	295	170	179	161	157	11 C / 2 mg
Conductance (EC) Dissolved Calcium	13.00	196 14.00	127 10.00		11.00	(c) (c)	159 12	13	170	11.5	11.4	157	uS/cm mg/L
	8.00	9.00	5.00	5.00	6.00		7	9	8	8.44	7.2	6.94	Ŭ
Dissolved Magnesium						(c)							mg/L
Dissolved Nitrite + Nitrate	1.40	0.63	0.20	0.13	0.01	(c)	ND	ND	ND 4.1	0.1	(e)	0.69	mg/L as N
Dissolved Organic Carbon	5.60	6.80	2.50	3.20	3.20	(c)	2.6	4.1	4.1	4	7.1	3.2	mg/L as C mg/L as
Hardness	65.00	72.00	46.00	46.00	52.00	(c)	59	70	65	63	58	55	CaCO3
Ortho-phosphate	0.07	0.03	0.02	0.03	0.09	(c)	0.01	0.02	ND	0.02	0.05	0.02	mg/L as P
рН	7.60	7.40	7.20	7.20	6.90	(c)	7.9	7.6	6.8	7.4	7.4	7	pH units
Total Alkalinity	76.00	66.00	46.00	48.00	60.00	(c)	62	126	65	66	49	53	mg/L as CaCO3
Total Dissolved Solids	112.00	145.00	7.00		92.00	(c)	96	168	106	112	110	98	mg/L
Total Suspended Solids	17.00	62.00		14.00		(c)	22	32	20	14	(a)	29	mg/L
Turbidity	15.30	56.00		11.20		(c)	15	25	16	11	75	21	NTU
						(-)					, ,		
Organic													
Azinphos methyl (Guthion)	ND	ND	ND	ND	ND	(c)	ND	ND	ND	ND	ND	ND	ug/L
Benfluralin	ND	ND	ND	ND	ND	(c)	ND	ND	ND	ND	ND	ND	ug/L ug/L
Bromacil	ND	ND	ND	ND	ND	(c)	ND	ND	ND	ND	ND	ND	ug/L ug/L
Carbophenothion (Trithion)	ND	ND	ND	ND	ND	(c)	ND	ND	ND	ND	ND	ND	ug/L ug/L
Chlorpyrifos	ND	ND	ND	ND	ND	(c)	ND	ND	ND	ND	ND	ND	ug/L
Cyanazine	ND	ND	ND	ND	ND	(c)	ND	ND	ND	ND	ND	ND	ug/L
Demeton (O + S)	ND	ND	ND	ND	ND	(c)	ND	ND	ND	ND	ND	ND	ug/L ug/L
Diazinon	0.02	0.01	ND	ND	ND	(c)	ND	ND	ND	ND	ND	ND	ug/L
Dimethoate	ND	ND	ND	ND	ND	(c)	ND	ND	ND	ND	ND	ND	ug/L
Disulfoton	ND	ND	ND	ND	ND	(c)	ND	ND	ND	ND	ND	ND	ug/L
Ethion	ND	ND	ND	ND	ND	(c)	ND	ND	ND	ND	ND	ND	ug/L
Malathion	ND	ND	ND	ND	ND	(c)	ND	ND	ND	ND	ND	ND	ug/L
Methidathion	ND	ND	ND	ND	ND	(c)	ND	ND	ND	ND	ND	ND	ug/L
Mevinphos	ND	ND	ND	ND	ND	(c)	ND	ND	ND	ND	ND	ND	ug/L
Naled	ND	ND	ND	ND	ND	(c)	ND	ND	ND	ND	ND	ND	ug/L
Napropamide	ND	ND	ND	ND	ND	(c)	ND	ND	ND	ND	ND	ND	ug/L
Norflurazon	ND	ND	ND	ND	ND	(c)	ND	ND	ND	ND	ND	ND	ug/L
Parathion (Ethyl)	ND	ND	ND	ND	ND	(c)	ND	ND	ND	ND	ND	ND	ug/L
Parathion (Methyl)	ND	ND	ND	ND	ND	(c)	ND	ND	ND	ND	ND	ND	ug/L
Pendimethalin	ND	ND	ND	ND	ND	(c)	ND	ND	ND	ND	ND	ND	ug/L
Phorate	ND	ND	ND	ND	ND	(c)	ND	ND	ND	ND	ND	ND	ug/L

Table B-5. Water Quality Monitoring Results for Auburn Ravine, Coon Creek, and Cross Canal, from the DWR Central District Monitoring Program

Cross Canal Results													
Sampling Conducted by DWR-Cent	ral Distr	ict	P	ROVI	SIONA	L DAT	'A - N(T RE	VIEWEI	FOR A	CCURA	CY	
Sample Date:	1/25/01	3/1/01	4/5/01	5/3/01	6/6/01	7/17/01	8/2/01	9/6/01	10/11/01	10/31/01	12/21/01	1/17/02	
<u>Analyte</u>													<u>Units</u>
Phosalone	ND	ND	ND	ND	ND	(c)	ND	ND	ND	ND	ND	ND	ug/L
Phosmet	ND	ND	ND	ND	ND	(c)	ND	ND	ND	ND	ND	ND	ug/L
Profenofos	ND	ND	ND	ND	ND	(c)	ND	ND	ND	ND	ND	ND	ug/L
Prometryn	ND	ND	ND	ND	ND	(c)	ND	ND	ND	ND	ND	ND	ug/L
Propetamphos	ND	ND	ND	ND	ND	(c)	ND	ND	ND	ND	ND	ND	ug/L
s,s,s-Tributyl													
Phosphorotrithiote (DEF)	ND	ND	ND	ND	ND	(c)	ND	ND	ND	ND	ND	ND	ug/L
Trifluralin	ND	ND	ND	ND	ND	(c)	ND	ND	ND	ND	ND	ND	ug/L
<u>Biological</u>													
Total Coliform													
Fecal coliform	(b)	(b)	(b)	500	500	(c)	110	50	170	56	>1600	500	MPN/100 mL
Escherichia coli	(b)	(b)	(b)	300	170	(c)	33	50	110	9	300	17	MPN
Trace Metals													
Al	859	2770	513	475	101	(c)	663	851	599	417	3920	951	ug/L
As	0.621	0.956	0.815	0.957	1.75	(c)	1.13	1.44	0.879	0.613	1.394	1.08	ug/L
Cd	0.039	0.052	0.014	0.015	0.023	(c)	0.015	0.014	0.013	0.015	0.098	0.026	ug/L
Cr	2.17	7.06	1.77	1.30	0.32	(c)	1.92	2.08	1.56	1.08	7.7	2.57	ug/L
Cu	4.45	11.0	2.99	2.98	2.14	(c)	2.78	3.02	3.43	3.54	11.7	4.19	ug/L
Fe	1250	4350	1010	839	277	(c)	996	1400	993	790	5190	1550	ug/L
Hg	7.49	11.3	8.98	6.49	4.99	(c)	6.46	4.58	3.09	2.84	28.8	21.9	ng/L
МеНg	0.210	0.439	0.224	0.409	0.045	(c)	0.389	0.399	0.166	0.128	0.617	0.251	ng/L
Mn	65.8	137	67.1	68.7	899	(c)	71.7	120	72.2	40.4	163	66	ug/L
Ni	2.94	(d)	2.10	1.91	3.89	(c)	2	2.52	2.55	2.46	9.2	3.41	ug/L
Se	ND	0.35	ND	0.20	0.27	(c)	0.38	0.18	ND	0.19	ND	0.35	ug/L
Zn	5.55	10.20	3.01	1.90	1.13	(c)	2.91	2.6	2.36	2.28	15.8	6.14	ug/L

Notes

- (a) TSS test not conducted for this sample as hold times were violated at laboratory.
- (b) Biological analyses not conducted for this sampling event, as contract for using the subcontracted lab was not yet established.
- (c) No flow in Cross Canal on 7/17/2001.
- (d) Nickel concentration was not analyzed for by the contract laboratory.
- (e) Sample improperly preserved.

ND: Analyte concentration below method reporting limit.

Appendix B: Water Quality